DWR Briefing For
Assembly Committee on Utilities and Commerce

January 22, 2008

DWR Contract Renegotiation Overview

Number of original agreements: 58

Original portfolio projected cost: $42.5 billion

Agreements renegotiated: 34

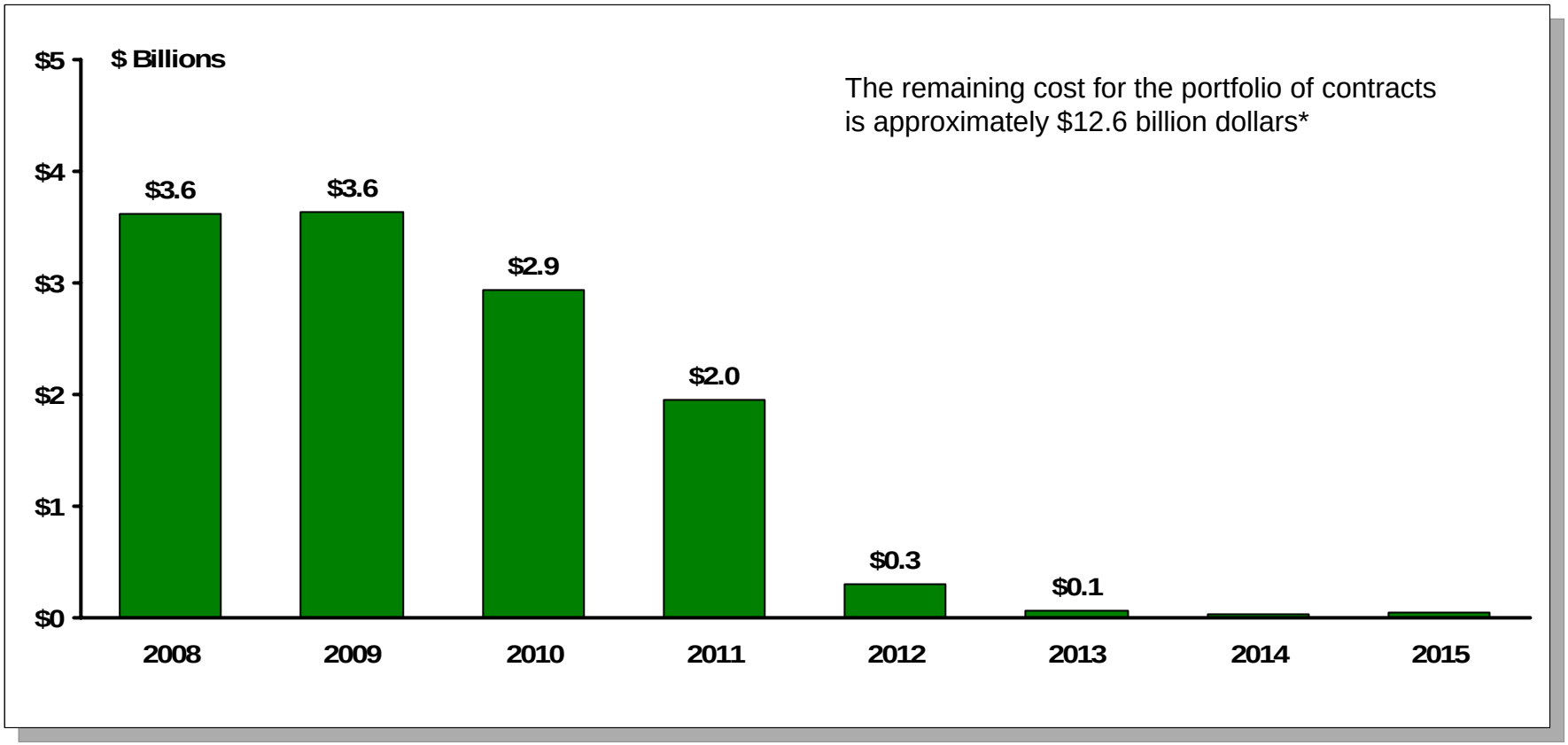
Cost reductions through renegotiations: Approx. $7.4 billion

Number of agreements remaining (from original 56): 26

Counter-parties with contracts under original terms: Coral, Sempra, PacifiCorp

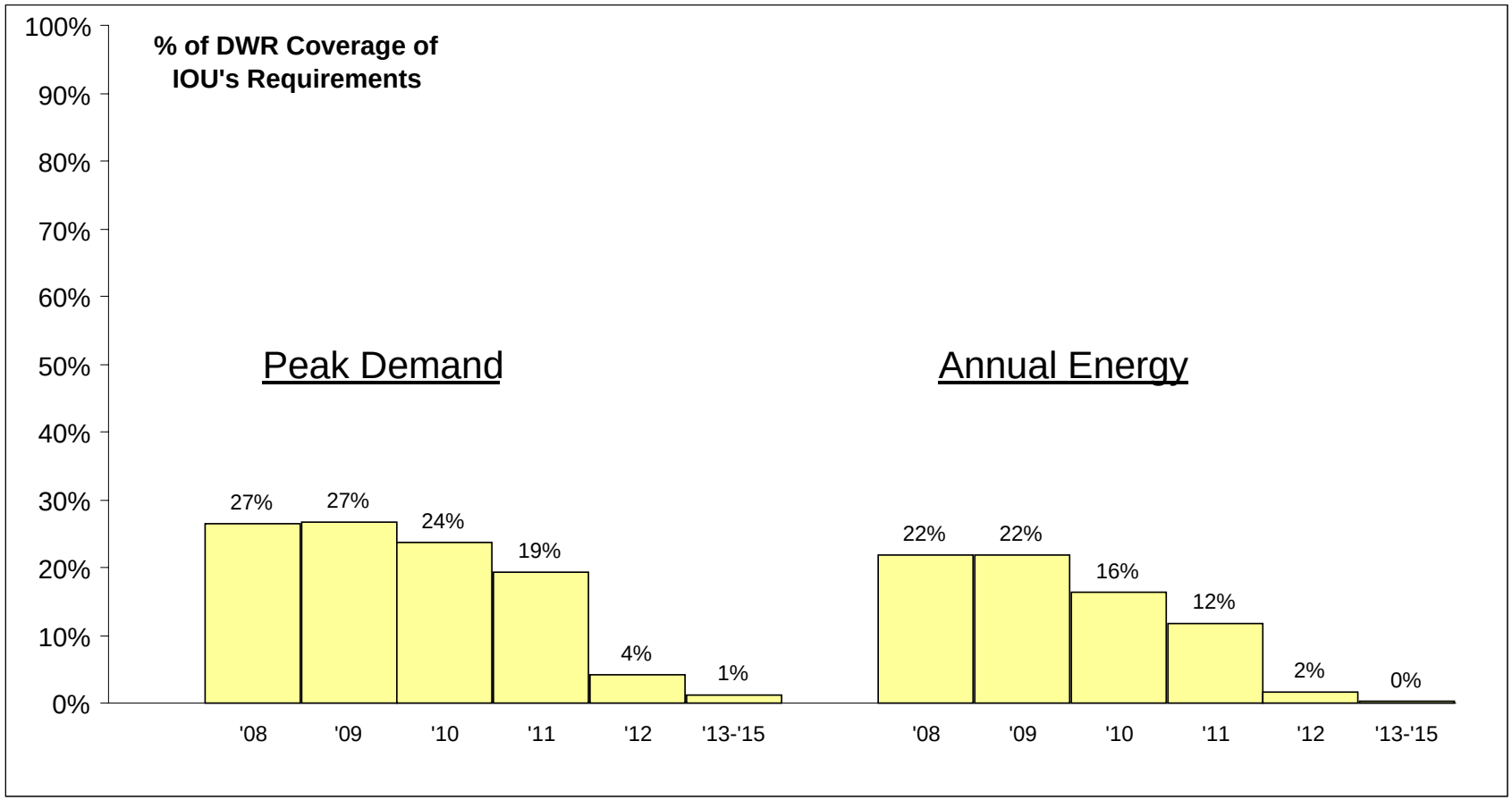
Current projected remaining balance portfolio cost: $12.6 billion

DWR Contract Costs – 2008 thru 2015



Note: Data from CDWR-CERS revenue requirement model (PM9 w/ Calpine renegotiated).
(*) Annual projections may vary due to updates to gas price forecasts, contract utilization, and other assumptions.
Excludes Williams Gas Supply Contract, revenue from surplus energy sales, bond charges, reserves, and other costs.

DWR Portfolio as a Percentage of IOU Peak Demand / Energy



Note: Percentages are approximate and are based on a CERS analysis of publicly available information from the California ISO and Investor Owned Utilities. The percentages for annual energy assume that 100% of the DWR portfolio is used to meet end-use demand.

2001 Findings of the Bureau of State Audits

- The DWR portfolio leaves it exposed to substantial market risk in high peak-demand periods if supply shortages occur and to substantial market risk with surplus contract amounts in other hours of the year. Contracts provide ample energy but not sufficient capacity.

- The portfolio does not contain sufficient power for peak-demand periods, thus potentially exposing consumers to high market prices if energy supply becomes limited during those periods.

- The portfolio lacks the flexibility to substantially reduce purchases. Many of the contracts are non-dispatchable, meaning that they lack the flexibility to substantially reduce purchases during periods of surplus or low market prices and must pay for the power whether or not it is needed.

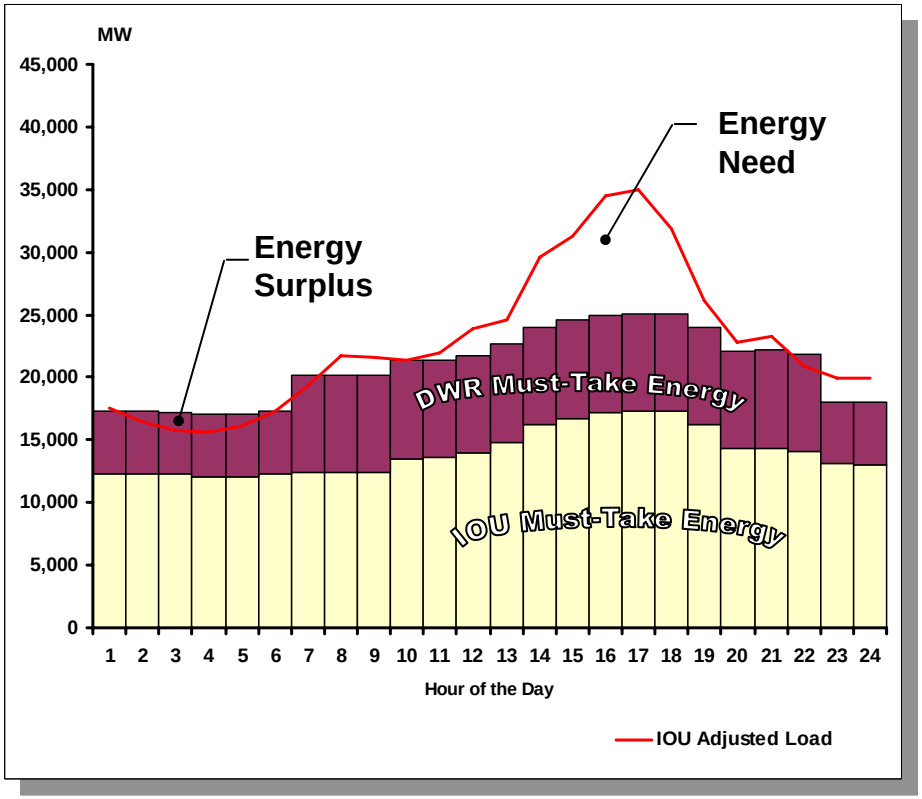
- DWR's portfolio emphasizes significant amounts of fixed price energy to limit volatility also limits potential portfolio cost savings if power prices decline. DWR could also have employed more tolling agreements, which would have allowed the contract price to decrease if gas prices decrease.

- The Bureau of State Audits' follow-up report in April 2003 found that the DWR portfolio had improved.

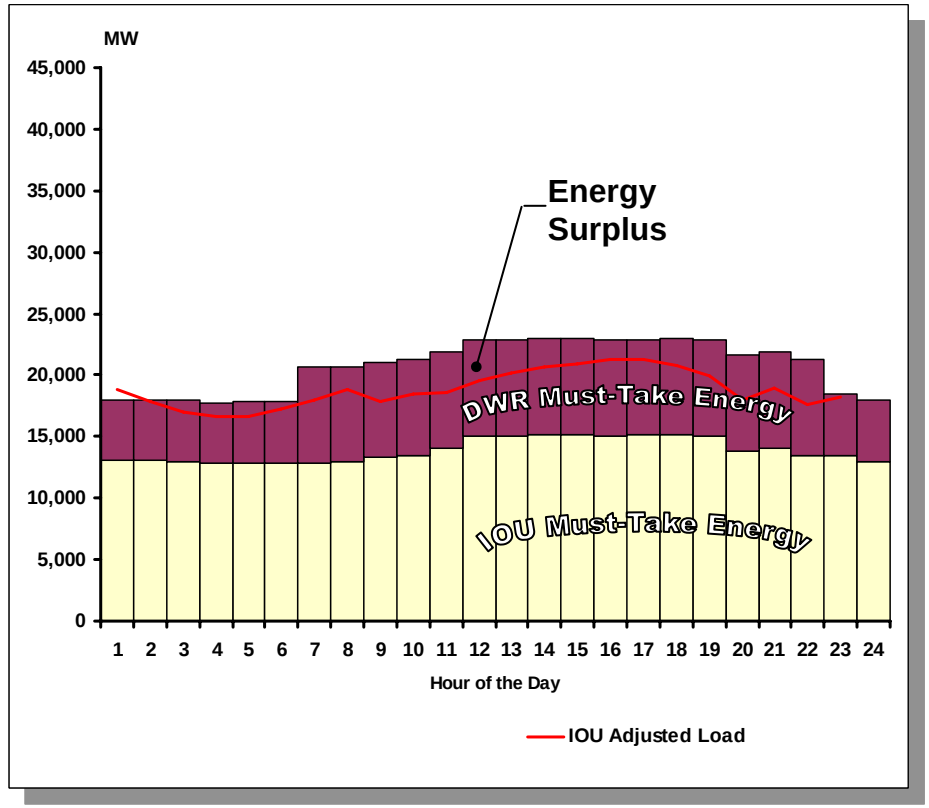
"California Energy Markets: Pressures Have Eased, but Cost Risks Remain", Bureau of State Audits, (December 2001).

Combined DWR/IOU Portfolio Has Simultaneous Energy Surpluses and Energy Needs

Peak Day



Low Load Day



- For the period of 2004 through 2007, DWR supplied state ratepayers an average of 57,000 GWh annually. In the same period the combined IOU/DWR portfolio produced 19,000 GWh of surplus sales annually at an average price of less than $50/MWh. This volume of surplus sales is approximately 33 percent of the energy provided by DWR.
- Energy surpluses can be reduced by converting must-take to dispatchable

Timeline for Calpine 2 Renegotiation Efforts

- 2004: Calpine 1 & 2 was a poor fit for PG&E resulting in surplus DWR power being sold-of in market below DWR's cost.

- 2004 thru February 2007: 3-Party talks (between PG&E, Calpine and DWR) to fix Calpine contracts, reduce surplus sales and losses.

- August 2007:
  - DWR was successful in preventing Calpine from rejecting the Calpine 2 contract in Bankruptcy.
  - DWR requests CPUC to: i) direct PG&E to take-over Calpine 2, and ii) fix how utilities pay for DWR costs so PG&E customers unharmed.
  - DWR requests PG&E take-over Calpine 2. DWR commits to work with CPUC and prevent PG&E customers from being harmed. PG&E informed the alternative is termination of the Contract.

- October 2007: DWR and Calpine reach agreement in principle on contract amendment.

- November 2007: DWR and Calpine finalize amendment.

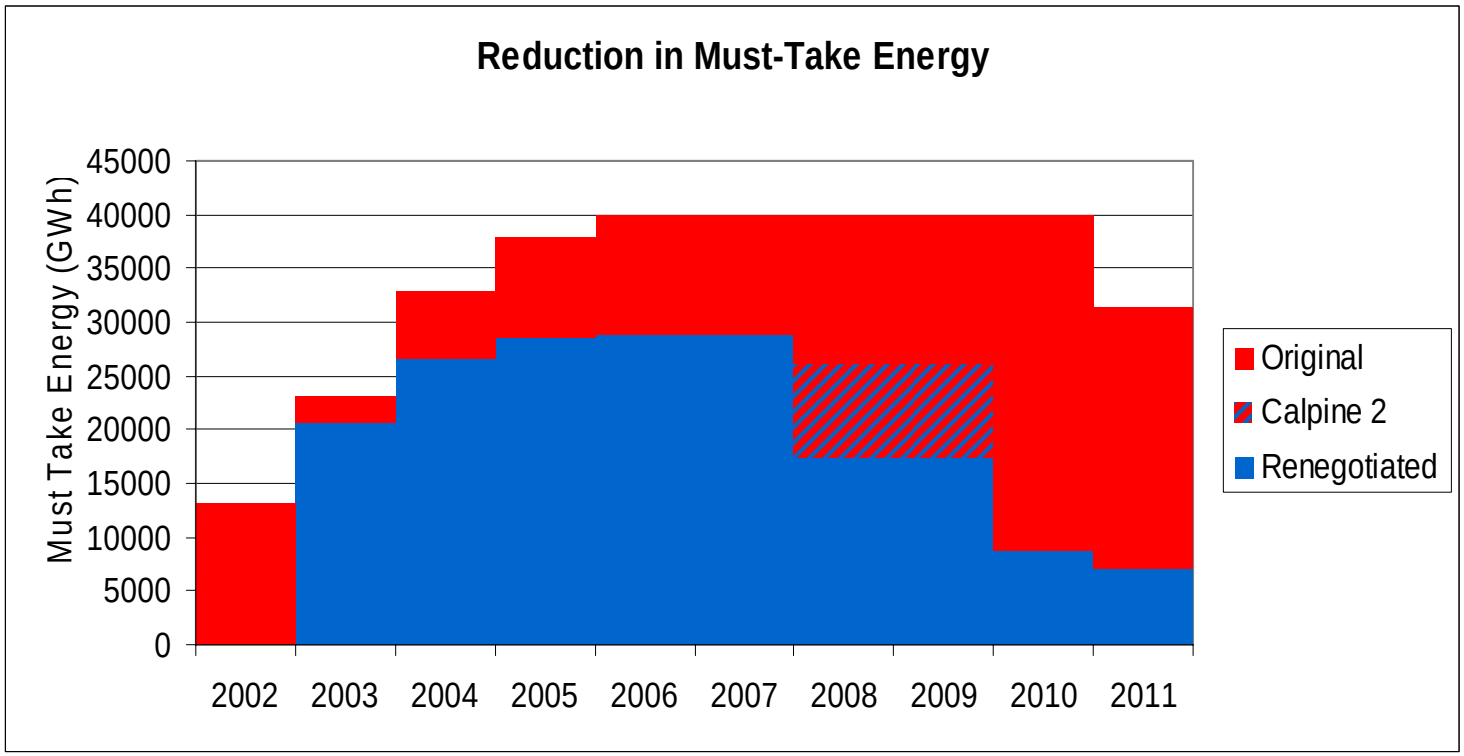
Renegotiation Goals for Calpine 2

- **Reduce Must-Take Energy and Add Dispatchable Capacity**
  - **Must-take** energy is delivered by a supplier to the buyer ***regardless*** of whether the buyer can use it all.
  - **Dispatchable capacity** means that the buyer of electricity under the contract can call upon the supplier to provide a specific amount of electricity ***when it is needed*** and economical to do so.

- **Preserve Under-Market Value of Original Contract**
  - **The under-market value** equals the difference between the fixed-price for energy under the contract —$59.60 per megawatt hour— and the market prices for electricity for the remainder of the original contract term.

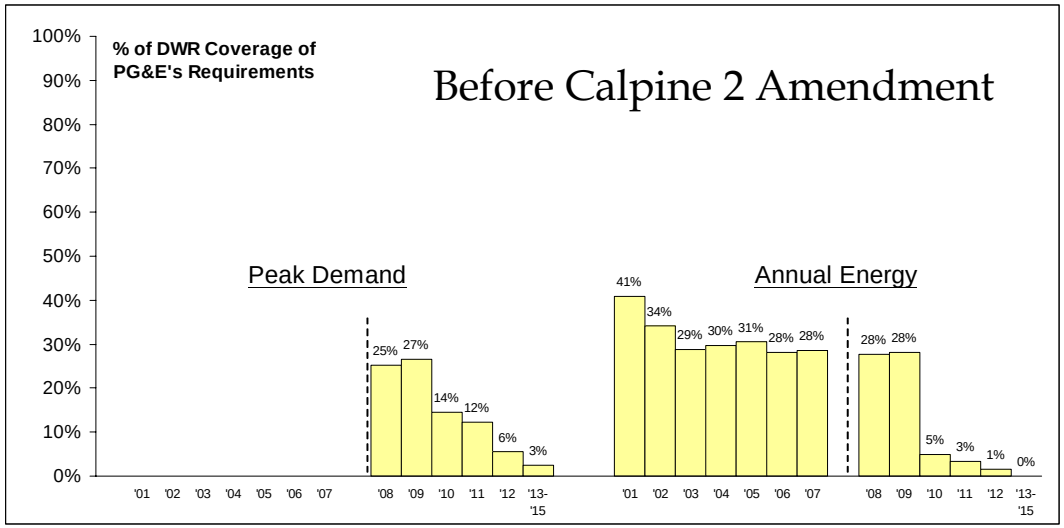
- **Achieve "Net Ratepayer Savings"**
  - **Net ratepayer saving** equals the difference between total ratepayer cost and total ratepayer savings.

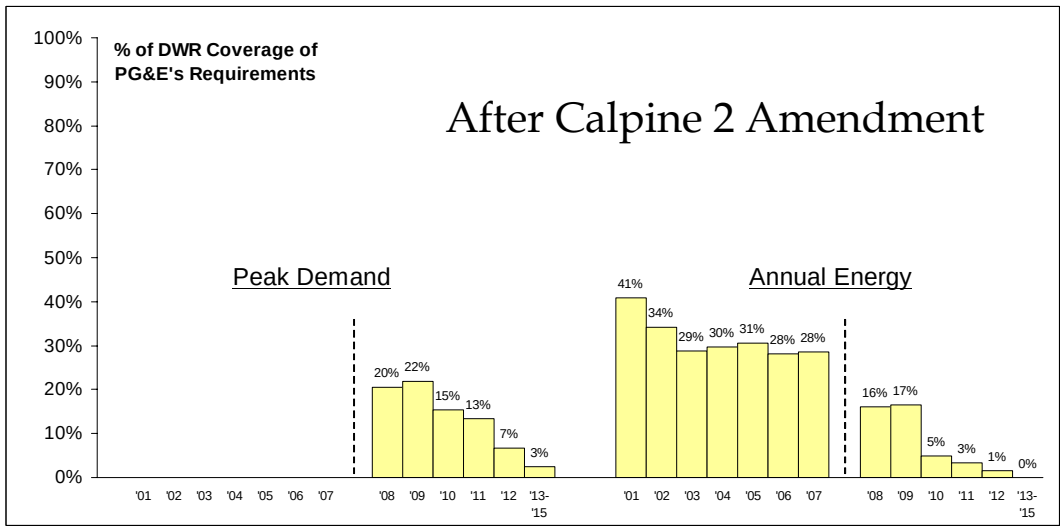
Calpine 2 Amendment Consistent with Past Renegotiations to Reduce Must-Take Energy



Contracts Renegotiated to eliminate must-take energy: Morgan Stanley, Williams, Allegheny, Calpine 1 & 2 (2002), High Desert.

DWR Portfolio as a Percentage of PG&E Peak Demand / Energy





Note: Percentages are approximate and are based on a CERS analysis of publicly available information from the California ISO and Investor Owned Utilities. The percentages for annual energy assume that 100% of the DWR portfolio is used to meet end-use demand.

Amendment Adds Dispatchable Capacity & Preserves Under-Market Value

- Original Calpine 2 – 1,000 MW 7x24 through 2009 – Fixed Energy Price - $59.60/MWh. Amendment eliminates 1,000 MW of 7x24 and approx. $1 billion in cost

- Under-market value of Calpine 2 contract is $158 million.

- Amendment adds 180 MW of dispatchable peaking capacity from the Calpine Los Esteros facility for 2 years, with a three-year option starting January 2008 at a cost of $24/kW-yr.

- Amendment preserves value of original contract.
  - Value of Peaking Capacity $200/kW-yr
  - Cost of Peaking Capacity in Amendment $24/kW-yr
  - Value of Capacity Payment $176/kW-yr

- $176/kW-yr * 180,000 kW * 5 yrs $158 million

Amendment Provides Net Ratepayer Savings

	($ million)
Original Calpine 2 Replacement Energy + Foregone Surplus Sales Revenue	$1,085
Resource Adequacy (capacity value) of original Calpine 2 contract	$44
Contract Price for the amended Calpine 2 contract	$22
➢ **Total Ratepayer Cost**	**$1,151**
Original Calpine 2 Contract Cost for 2008-09	$1,046
5-yr Capacity Value of the 180 MW from amended Calpine 2	$180
➢ **Total Ratepayer Savings**	**$1,226**

➢ **Ratepayer Savings – Ratepayer Cost = Net Ratepayer Saving** **$75 million**

Loss of Cross-Subsidy

- While the Calpine 2 amendment provides net savings statewide, these savings would be disproportionately applied ***unless*** the CPUC's allocation of DWR contract cost methodology were adjusted.

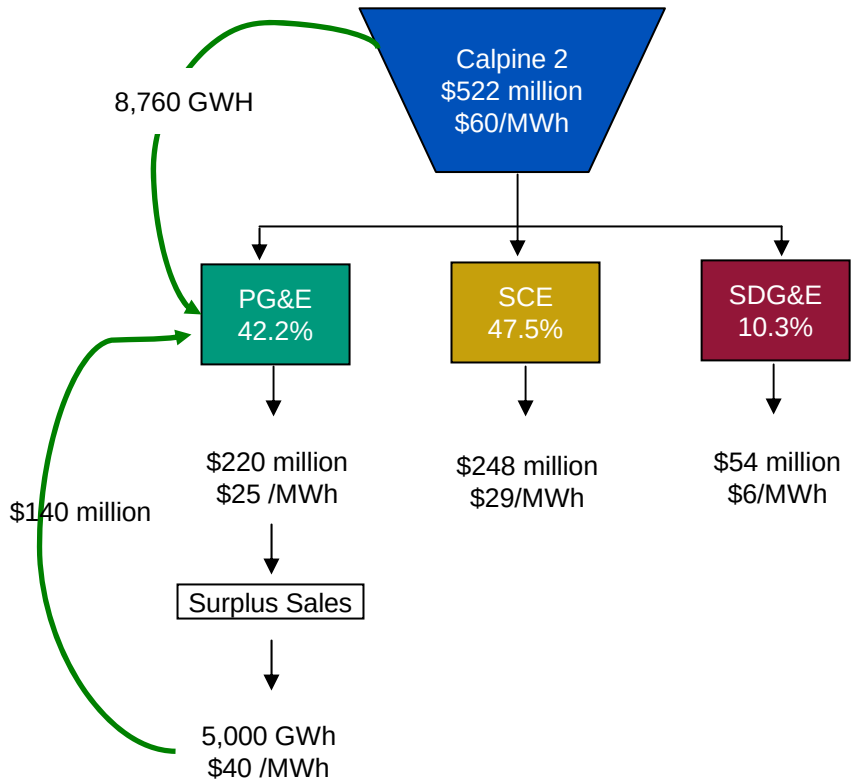
- DWR requested that upon submission of DWR's Supplemental Proposed 2008 Revenue Requirement, the CPUC modify the cost allocation of the DWR contracts to equitably allocate the changes in DWR's total costs resulting from the Calpine 2 amendment.*

- If the CPUC leaves the current allocation methodology unchanged:
  - SCE and SDG&E customers will ***significantly benefit*** from the changes to Calpine 2; and
  - PG&E will incur the full cost of replacement power.

*December 14, 2007 letter to CPUC President Peevey.

Allocation of DWR Fixed Contract Costs

- All capacity payments and the total costs of the must-take energy contracts are shared by the IOU ratepayers.
- CPUC allocation of DWR contracts and fixed costs masks the costs utilities see.
- The current allocation does not provide an incentive for an IOU to avoid surplus sales that result in losses to statewide ratepayers.
- In the example of Calpine 2, the total costs are shared by each IOU whereas all of the energy is delivered to PG&E.
- PG&E surplus, aty an average rate of $40/MWh, were less than the $60/MWh contract rate, but generate revenue for PG&E ratepayers because it was in excess of PG&E's $25/MWh allocated rate.



Policy Issues & Concerns

- Seven years after the State's energy crisis, DWR **continues to play a significant role** in meeting statewide demand for electricity.
- DWR's role was meant to be **temporary**.
- DWR's continued involvement in energy markets has lead to certain **inefficiencies**, as well as conflicts with other State energy policies.
- IOUs are in the best position to manage and renegotiate DWR contracts to provide for improved product fit and construction of new renewable generation sources.
- The IOUs could use their long-term involvement in energy markets as leverage in renegotiating the contracts to:
  - Retain generation resources—paid for by the DWR contracts—at a lower cost compared to new generation; and
  - Provide a source of revenue for new green resources that need long-term contracts to secure project financing.

DWR Portfolio

Contract No.	Contract Name	Category Type	Contract Term End Date	1/1/2008	2/1/2008	7/1/2008	7/1/2009	7/1/2010	7/1/2011	7/1/2012	7/1/2013	7/1/2014	7/1/2015
1	Calpine 1	7x24	12/31/2009	1,000	1,000	1,000	1,000	-	-	-	-	-	-
2	Calpine 2	Dispatch	12/31/2009	180	180	180	180	-	-	-	-		-
3	PacificCorp	Dispatch	6/30/2011	300	300	300	300	300	-	-	-	-	-
4	Calpine 3	Dispatch	7/31/2011	495	-	495	495	495	495	-	-	-	-
5	Wellhead - Fresno	Dispatch	10/31/2011	21	22	22	22	22	22	-	-	-	-
6	Wellhead - Gates	Dispatch	10/31/2011	46	46	46	46	46	46	-	-	-	-
7	Wellhead - Panoche	Dispatch	10/31/2011	50	50	50	50	50	50	-	-	-	-
8	Calpeak - Panoche	Dispatch	12/27/2011	51	51	51	51	51	51	-	-	-	-
9	GWF - Phase I,II	Dispatch	12/31/2011	192	192	192	192	192	192	-	-	-	-
10	CalPeak - Vaca Dixon	Dispatch	1/1/2012	50	50	50	50	50	50	-	-	-	-
11	Coral - Peak	6x16	6/30/2012	750	750	750	750	450	450	-	-	-	-
11	Coral - Base	7x24	6/30/2012	100	100	100	100	100	100		-	-	-
9	GWF - Phase III	Dispatch	10/31/2012	169	169	169	169	169	169	169	-	-	-
12	Kings River Conservation District	Dispatch	9/17/2015	97	97	97	97	97	97	97	97	97	97
13	San Francisco Peakers	Dispatch	TBD	-	-	-	192	192	192	192	192	192	192
			PG&E Totals	3,501	3,007	3,532	3,724	2,244	1,944	488	289	289	289
14	Colton - Drews	Dispatch	12/31/2010		-	40	40	40	-	-	-	-	-
14	Colton - Century	Dispatch	12/31/2010		-	40	40	40	-	-	-	-	-
15	Bear Energy AL1,AL5,AL6	Dispatch	12/31/2010	655	655	655	655	655	-	-	-	-	-
15	Bear Energy HB1	Dispatch	12/31/2010	215	215	215	215	215	-	-	-	-	-
15	Bear Energy RB6	Dispatch	12/31/2010	175	175	175	175	175					
16	High Desert	Dispatch	1/21/2011	840	825	730	730	730	-	-	-	-	-
17	Sempra - Base	7x24	9/30/2011	1,200	1,200	1,200	1,200	1,200	1,200	-	-	-	-
17	Sempra - Peak	6x16	9/30/2011	400	400	400	400	400	400	-	-	-	-
18	Mountain View (Wind)	Renewable	9/30/2011	67	67	67	67	67	67	-	-	-	-
19	Allegheny	7x24	12/31/2011	800	800	800	800	800	800	-	-	-	-
			SCE Totals	4,352	4,337	4,322	4,322	4,322	2,467	-	-		-
20	Bear Energy A	7x24	12/31/2007	-	-	-	-	-	-	-	-	-	-
20	Bear Energy B	6x16	12/31/2010	275	275	275	275	275	-	-	-	-	-
20	Bear Energy C	6x16	12/31/2010	50	50	50	50	50	-	-	-	-	-
21	Calpeak - Border	Dispatch	10/23/2011	52	52	52	52	52	52	-	-	-	-
22	Calpeak - Escondido	Dispatch	12/8/2011	53	53	53	53	53	53	-	-	-	-
23	Calpeak - El Cajon	Dispatch	1/1/2012	52	52	52	52	52	52	-	-	-	-
24	Sunrise	Dispatch	6/30/2012	575	575	575	575	575	575	-	-	-	-
25	Whitewater Cabazon (Wind)	Renewable	12/31/2013	43	43	43	43	43	43	43	43	-	-
26	Whitewater Hill (Wind)	Renewable	12/31/2013	62	62	62	62	62	62	62	62	-	-
26 Total CERS Contracts			**SDG&E Totals**	1,161	1,161	1,161	1,161	1,161	836	104	104	-	-
Notes:			**Grand Total**	9,014	8,505	9,015	9,207	7,727	5,247	592	393	289	289

Attachments

Glossary of Terms